

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

H04Q 7/38, H04B 7/26

(11) International Publication Number:

WO 99/14975

(43) International Publication Date:

25 March 1999 (25.03.99)

(21) International Application Number:

PCT/US98/19334

(22) International Filing Date:

16 September 1998 (16.09.98)

(30) Priority Data:

08/931,535

16 September 1997 (16.09.97) US

(71) Applicant: QUALCOMM INCORPORATED [US/US]; 6455 Lusk Boulevard, San Diego, CA 92121 (US).

(72) Inventors: REZAIIFAR, Ramin; 7580 Charmant Drive #2224, San Diego, CA 92121 (US). JOU, Yu-Cheun; 9979 Riverhead Drive, San Diego, CA 92129 (US). TIEDEMANN, Edward, G., Jr.; 4350 Bromfield Avenue, San Diego, CA 92122 (US).

(74) Agents: MILLER, Russell, B. et al.; Qualcomm Incorporated, 6455 Lusk Boulevard, San Diego, CA 92121 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

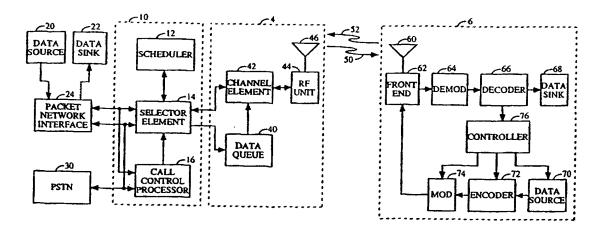
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(88) Date of publication of the international search report:

14 May 1999 (14.05.99)

(54) Title: CHANNEL STRUCTURE FOR COMMUNICATION SYSTEMS



(57) Abstract

In a channel structure for use in communication systems, two sets of physical channels, one for the forward link (50) and another for the reverse link (52), are utilized to facilitate communication of a variety of logical channels. The physical channels comprise data and control channels. In the exemplary embodiment, the data channels comprise fundamental channels which are used to transmit voice traffic, data traffic, high speed data, and other overhead information and supplemental channels which are used to transmit high speed data. The fundamental channels can be released when the remote stations are idle to more fully utilize the available capacity. The control channels are used to transmit paging and control messages and scheduling information.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
ΑT	Austria	FR	France	LU	Luxembourg	SN	Senegal
ΑU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados .	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav	TM	Turkmenistan
BF	Burkina Faso	GR	Greece		Republic of Macedonia	TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
ВJ	Benin	ΙE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	zw	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	ΚZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia .	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

Interr nal Application No PCT/US 98/19334

PCT/US 98/19334 CLASSIFICATION OF SUBJECT MATTER IPC 6 H0407/38H04B7/26 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) IPC 6 H040 H04B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. WO 96 27959 A (NOKIA TELECOMMUNICATIONS OY Υ 1,2,7,8, ;RAESAENEN JUHA (FI)) 12 September 1996 11,12, 15,36, 37.39-41see abstract see page 1, line 22 - page 2, line 20 see page 13, line 17 - line 34 see claim 1 Y US 5 267 261 A (BLAKENEY II ROBERT D ET 1,2,7,8, AL) 30 November 1993 11,12, 15,36, 37,39-41see column 6, line 35 - column 7, line 12 see claim 1; figure 3 Further documents are listed in the continuation of box C. Х X Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other, such docuother means ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 10 March 1999 23/03/1999 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL · 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Lazaridis, P Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT

Intern 1al Application No PCT/US 98/19334

		PCT/US 98/19334				
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Category ³	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
A	E. ZEHAVI AND E. TIEDEMANN: "The PCS CDMA system overview" IEEE INTERNATIONAL CONFERENCE ON UNIVERSAL PERSONAL COMMUNICATIONS,27 September 1994 - 1 October 1994, pages 83-88, XP002096111 San Diego, CA, USA see page 83, right-hand column, line 16 - page 84, left-hand column, line 27 see page 85, right-hand column, line 12 - line 39	1-41				
	. 2.					

INTERNATIONAL SEARCH REPORT

information on patent family members

PCT/US 98/19334

Patent document cited in search report		Publication date	Patent tamily member(s)		Publication date	
WO 9627959	A	12-09-1996	FI AU CA EP NO	951019 A 4833296 A 2211095 A 0813779 A 974099 A	07-09-1996 23-09-1996 12-09-1996 29-12-1997 06-11-1997	
US 5267261	Α	30-11-1993	US	5640414 A	17-06-1997	

. .

Form PCT/ISA/210 (nater) family appear (hely 1000)

THIS PAGE BLANK (USPTO)